

*Handwritten signature and number 723*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Robert A. Foster  
Assignee: Financial Systems Technology Pty. Ltd.  
Title: Data Processing System for Complex Pricing and Transactional Analysis  
Serial No.: 09/535,573 Filing Date: March 27, 2000  
Examiner: Cuong H. Nguyen Group Art Unit: 3625  
Docket No.: M-4540-1C US

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**SUPPLEMENTARY APPEAL BRIEF**

Dear Sir:

In response to the Final Office Action of November 4, 2003, Appellant submits this Supplementary Appeal Brief. Claims 47-86, which are pending in this appeal, are set forth below:

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IN THE CLAIMS

1-46 (canceled).

47. (Previous presented) In a computer-readable medium, a method for providing a database suitable for pricing transactions, the method comprising:

creating, in the computer-readable medium, a transaction instance corresponding to a transaction;

creating, in the computer-readable medium, a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

creating, in the computer-readable medium, a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

48. (Previous presented) The method of claim 47, further comprising creating, in the computer-readable medium, a second production service instance linked to said transaction instance by said first relation instance.

49. (Previous presented) The method of claim 47, further comprising creating, in the computer-readable medium, a second billing service instance linked to said first production service instance by said second relation instance.

50. (Previous presented) The method of claim 47, further comprising creating, in the computer-readable medium, a second production service instance linked to said transaction instance by a third relation instance.

51. (Previous presented) The method of claim 47, further comprising creating, in the computer-readable medium, a second billing service instance linked to said first production service instance by a third relation instance.

52. (Previous presented) The method of claim 47, further comprising, in the computer-readable medium, creating a third relation instance linking said transaction instance to an account instance.

53. (Previously presented) The method of claim 52, wherein said account instance is linked to a client instance by a fourth relation instance.

54. (Previous presented) The method of claim 52, further comprising creating, in the computer-readable medium, a fourth relation instance linking said transaction instance to an entity instance.

55. (Previous presented) The method of claim 54, wherein said entity instance is a market segment instance.

56. (Previous presented) The method of claim 47, further comprising storing said transaction instance, said production service instance and said billing service instance in at least one entity instance table.

57. (Previous presented) The method of claim 56, further comprising storing said first relation instance and said second relation instance in at least one relation instance table.

58. (Previous presented) The method of claim 47, further comprising creating, in the computer-readable medium, a settlement service instance linked to said billing service instance by a third relation instance.

59. (Previous presented) The method of claim 47, further comprising:

creating, in the computer-readable medium, a price table instance related to said transaction instance;

wherein said price table instance contains a price for said billing service instance.

60. (Previous presented) The method of claim 59, wherein said price table instance is a cost table instance and said price is a cost.

61. (Previous presented) The method of claim 59, wherein said price table instance is a fee table instance and said price is a fee.

62. (Previous presented) The method of claim 61 further comprising creating a cost table instance related to said fee table instance by a mandatory relation instance.

63. (Previous presented) The method of claim 47, further comprising:

creating, in the computer-readable medium, an entity instance related to said transaction instance; and creating a price table instance related to said entity instance;

wherein said price table instance contains & price for said billing service instance.

64. (Previous presented) The method of claim 63, wherein said entity instance is an account instance.

65. (Previous presented) The method of claim 47, further comprising:

creating, in the computer-readable medium, a first entity instance related to said transaction instance;

creating, in the computer-readable medium, a second entity instance related to said first entity instance; and creating a first price table instance related to said second entity instance;

wherein said first price table instance contains a price for said billing service instance.

66. (Previous presented) The method of claim 65, wherein said first entity instance is an account instance and said second entity instance is a client instance.

67. (Previous presented) The method of claim 65, further comprising creating, in the computer-readable medium, a second price table instance related to first entity instance.

68. (Previous presented) A database data processing system for pricing transactions, said data processing system comprising:

means for creating a transaction instance corresponding to a transaction;

means for creating a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

means for creating a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

69. (Previous presented) The data processing system of Claim 68, further comprising means for creating a second production service instance linked to said transaction instance by said first relation instance.

70. (Previous presented) The data processing system of claim 68, further comprising means for creating a second billing service instance linked to said first production service instance by said second relation instance.

71. (Previous presented) The data processing system of claim 68, further comprising means for creating a second production service instance linked to said transaction instance by a third relation instance.

72. (Previous presented) The data processing system of claim 68, further comprising means for creating a second billing service instance linked to said first production service instance by a third relation instance.

73. (Previous presented) The data processing system of claim 68, further comprising means for creating a third relation instance linking said transaction instance to an account instance.

74. (Previous presented) The data processing system of claim 73, wherein said account instance is linked to a client instance by a fourth relation instance.

75. (Previous presented) The data processing system of claim 68, further comprising means for creating a fourth relation instance linking said transaction instance to an entity instance.

76. (Previous presented) The data processing system of claim 68, further comprising at least one entity instance table to store said transaction instance, said production service instance and said billing service instance.

77. (Previous presented) The data processing system of claim 76, further comprising at least one relation instance table to store said first relation instance and said second relation instance.

78. (Previous presented) The data processing system of claim 68, further comprising means for creating a settlement service instance linked to said billing service instance by a third relation instance.

79. (Previous presented) The data processing system of claim 68, further comprising:

means for creating a price table instance related to said transaction instance;

wherein said price table instance contains a price for said billing service instance.

80. (Previous presented) The data processing system of claim 79, wherein said price table instance is a cost table instance and said price is a cost.

81. (Previous presented) The data processing system of claim 79, wherein said price table instance is a fee table instance and said price is a fee.

82. (Previous presented) The data processing system of claim 81 further comprising means for creating a cost table instance related to said fee table instance by a mandatory relation instance.

83. (Previous presented) The data processing system of claim 68, further comprising:

means for creating an entity instance related to said transaction instance; and  
means for creating a price table instance related to said entity instance;

wherein said price table instance contains a price for said billing service instance.

84. (Previous presented) The data processing system of claim 68, further comprising:

means for creating a first entity instance related to said transaction instance;



means for creating a second entity instance related to said first entity instance;  
and means for creating a first price table instance related to said second entity  
instance;

wherein said first price table instance contains a price for said billing service  
instance.

85. (Previous presented) The data processing system of claim 84, wherein said first  
entity instance is an account instance and said second entity instance is a client instance.

86. (Previous presented) The data processing system of claim 84, further  
comprising means for creating a second price table instance related to first entity instance.

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## REMARKS

In response to Appellants' Appeal Brief of July 10, 2003, the Examiner reopened prosecution of the above-referenced patent application in the Final Office Action of November 4, 2003, by rejecting Claims 47-86 under 35 U.S.C. § 112, second paragraph and under 35 U.S.C. § 103(a). Both rejections were made on new grounds and, as set forth below, the office action was improperly made final. Therefore, in view of the supplementary arguments below, Appellants respectfully requests that Appellant's Appeal be reinstated pursuant to 37 C.F.R. § 1.193(b)(2)(ii).

### The Office Action of November 4, 2003 was improperly made final.

In the Office Action of November 4, 2003, the Examiner states:

This Office Action is a Final Office Action because all the ground of rejections are provided with evidences of Burt et al., Moore et al., Claus et al. and Rothstein et al. that provided to the applicants previously; the examiner apologies for this delay.

Appellant respectfully submits that the Examiner's reason for making the Office Action final is inadequate. MPEP §1208.02 states:

The Office Action containing a new ground of rejection may be made final if the new ground of rejection was (A) necessitated by amendment, or (B) based on information presented in an information disclosure statement under 37 CFR 1.97(c) where no statement under 37 CFR 1/97(e) was filed.

Since the Examiner's rejections were neither necessitated by Appellant's amendment nor based on information presented in an information disclosure statement, the Office Action

of November 4, 2003 was improperly made final. Accordingly, Appellant respectfully requests that the Examiner withdraw the finality of the Office Action.

Rejection Under 35 U.S.C. § 112, second paragraph

In the Office Action of November 4, 2003, the Examiner rejected Claims 47 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of Appellant's invention. Insofar as the Examiner's Advisory Action of March 17, 2003 indicates that the pending claims 47-86 had overcome all 35 U.S.C. § 112, second paragraph, rejections, the present rejection under 35 U.S.C. § 112, second paragraph, is a new ground of rejection for these claims. The Examiner states, in pertinent part:

The examiner submits that there is a gap in this claim about how to perform pricing a transaction after a database is created. This claim is incomplete because a core step how to price is missing although the applicant claims this action; 35 USC 112, 2<sup>nd</sup> para. Rejection is applied (content of applicant's specification is not used as evidence that the scope of the claims is consistent with the subject matter which applicant regards as his invention).

Appellant respectfully disagrees with the Examiner. Claim 47 recites:

47. In a computer-readable medium, a method for providing a database suitable for pricing transactions, the method comprising:

(emphasis added)

Thus, it is clear that, contrary to the Examiner's assertion, Appellant claim is to a method providing a database suitable for pricing transactions, so that the pricing transaction -- which the Examiner admits is performed after the database is created -- is not a required

action to achieve the claimed database. Accordingly, Appellant respectfully submits that the Examiner's rejection under 35 U.S.C. § 112, second paragraph, is erroneous.

With respect to Claim 68, the Examiner states, in pertinent part:

The applicant omits a critical component of claimed system: i.e., a computer to execute an OOP program to create instances. Without that, there is a gap between structures in the claim.

Appellant respectfully disagrees with the Examiner. Claim 68 recites:

means for creating a transaction instance corresponding to a transaction;

means for creating a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

means for creating a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

(emphasis added)

Thus, Claim 68 already recites, in accordance with 35 U.S.C. § 112, paragraph 6, elements to create the recited instances. Such elements can be, but not necessarily be, an object-oriented program (OOP).

For the above reasons, Appellant respectfully submits that the Examiner's rejection of Claims 47 and 68 are erroneous and therefore requests that the Board reverses the Examiner's rejection of Claims 47-86 under 35 U.S.C. § 112, second paragraph.

Rejection under 35 U.S.C. § 103(a)

Instead of his rejection in the Final Office Action of November 6, 2002, which was based on U.S. Patent 5,630,127 ("Moore"), in view of U.S. Patent 5,559,313 ("Claus"), in view of U.S. Patent 5,682,482 ("Burt"), further in view of U.S. Patent 5,636,117 ("Rothstein"), the Examiner rejected Claims 47-53, 65-66 and 68-85 under 35 U.S.C. § 103(a) over Moore in view of Burt. This is a new ground of rejection for these claims.

The Examiner states in the Office Action of Nov. 4, 2003, in pertinent part:

Moore et al. ('127) disclose that a rule-based application structure could be a relational database where records of a transaction are related/linked to each other (see Moore, the abstract, Figs.3,4). Moore et al. teach that: service instances linking to transaction instances; creating a billing service instance linked to a service instance with relation instance (see Moore, "FIG. 4 is an object instance table." 6:54-59 "An example of this table is shown in FIG. 3. The names or "objects" are shown in columns "OBJECT" 302, "OBJECT1" 304 and "OBJECT2" 308. These names or "objects" stand for a multitude of particular instances of the data, any of which can be retrieved by specifying the identifiers of the entities listed above which would focus the access on a particular representation value." 10:5-19; 10:45-55 "An additional feature of the GRMS architecture is the placement of GRMS processor on the Business Professional's workstation 118 along with the Object Table 300, and the program defined in the object table 300. Since the object instance table 400 is also present, the Business Professional can change values in the Object instance table (via GRMS screens and functions) and reprocess the report on the workstation. All object accesses will be satisfied by the Object instance table function and therefore, the CMIM database 224 is not needed for this "What if" analysis reporting"; in OOP, "instance" is a variable name e.g., service instance, relation instance etc.).

Although Moore et al. teach about a financial institution, and a single transaction can generate many object instances (see Moore et al., 1:21-30 and Detailed Description Text portion (para. 439) "Unique identifier for a GRMS transaction. A single GRMS transaction can generate many object instances"),

Moore et al. do not explicitly disclose that financial transaction functions are connected together.

However, Burt et al. disclose a system with related functions including financial transaction functions connected together (e.g. see Burt et al., Fig. 5, the abstract, 4:25-27, and 25:2-16), comprising:

- creating a transaction instance corresponding to a financial transaction (e.g. see Burt et al., Fig. 5, the abstract, col. 6 lines 1-14, and col. 21 lines 42-59)

The examiner submits that because Moore et al. teach applications using OOP macros wherein "instance" is a variable instance – an instance is a single occurrence of a class –, it would be obvious for the analogous use of macros: "transaction instance", "service instance", and "billing service instance".

Appellant respectfully disagrees with the Examiner. The portions of Moore relied upon by the Examiner for his rejection, i.e., Figs. 3 and 4, the abstract and cols. 4-10, merely discloses a rule-based system for currency trading using a relational database, as clearly shown in Figs. 3 and 4. Thus, the following limitations of Claim 47 are neither disclosed nor suggested by Moore:

creating, in the computer-readable medium, a first production service instance representing an action performed to process said transaction, said first production service instance being linked to said transaction instance by a first relation instance; and

creating, in the computer-readable medium, a billing service instance representing a billing service related to a pricing of said first production service, said billing service instance being linked to said first production service instance by a second relation instance.

(emphasis added)

Burt also neither discloses nor suggests the above-quoted limitations of Claim 47. In the portions of Burt that the Examiner relied on for his rejection (i.e., Fig. 5, the abstract, cols.

4, 6, 21 and 24-25), Burt merely discloses “a network 10 is provided that includes a number of support system 14.” (col. 4, lines 42-43). Figure 5 “summarizes certain that is required by the agents of the four network layers, as applied to billing functions.” (col 24, lines 56-60). The functions are managed by management, fulfillment, charging and booking “agents.” (col. 21, lines 42-59; col. 24, line 60 to col. 25, line 16). Thus, the combined teachings of Moore and Burt do not disclose or suggest Appellant’s Claim 47.

The Examiner’s assertion that Moore’s teaches “applications using OOP macros wherein “instance” is a variable instance – an instance is a single occurrence of a class -, it would be obvious for the analogous use of macros: “translation instance”, “service instance” and “billing service instance” is irrelevant. The “instances” recited in Claim 47 are not variable instances of object-oriented program macros. Claim 47 are not limited in any way to the use of objected-oriented programming techniques.

For substantially the same reasons as stated with respect to Claim 47, the combined teachings of Moore and Burt also neither disclose nor suggest Claim 68. The separate patentability of each of dependent Claims 60-62, 64, 66, 55, 80-82 and 85 were previously specifically set forth in Appellant’s Appeal Brief of July 10, 2003 and are thus omitted.

Accordingly, Appellant respectfully requests that the Board reverse the Examiner’s rejection of Claims 47-54, 56-63, 65, 67 and 68-86 under 35 U.S.C. § 103(a) over Moore and Burt.

The Examiner also rejected Claim 55 under 35 U.S.C. § 103(a) as being unpatentable over Moore, Burt and U.S. Patent 5,636,117 ("Rothstein"), the Examiner refers to his rejection of Claim 54 and further states:

Rothstein further teaches that a market segment instance could be an entity instance (see 2:8-10; 2:54-47; 3:9-12) (e.g., mortgage entities are linked to business models by indices in a program).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine specific applications of Moore et al., and Burt et al. in OOP financial transaction with Rothstein because they all suggest a systematic method that use "instance" in OOP to track components of costs and fees each time a financial transaction is processed. Artisan would recognize that an instant in OOP would be a variable to measure the impact of any changes from financial transactions by tracking those instance variables.

Appellant respectfully disagrees with the Examiner. Claim 55 depends from Claims 47, 52 and 54 and thus is allowable for at least the reasons set forth above with respect to Claim 47. In addition, as recited in Claim 55, the market segment instance is linked to the transaction instance by a fourth relation instance, which is neither disclosed nor suggested by any of Moore, Burt and Rothstein. Thus, Claim 55 is allowable over Moore, Burt and Rothstein, individually and in combination. Appellant respectfully requests the Board to reverse the Examiner's rejection of Claim 55 under 35 U.S.C. § 103(a) over Moore, Burt and Rothstein.

The Examiner rejected Claims 64, 66 and 85 under 35 U.S.C. § 103(a) as being unpatentable over Moore, Burt and U.S. Patent 5,559,313 ("Claus"), the Examiner refers to his rejection of Claim 84 and further states:



Claus et al. further express analogous instances in a database, the examiner submits that since they are considered as variable instances in OOPs (see Figs 6, 9-11, 13, 15) for analogous examples tat were claimed about:

- an entity instance could be an account instance;
- an entity instance could be a client instance;
- an entity instance could be a market segment instance.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to combine certain applications to combine Moore et al., Burt et al., and Claus et al. in financial transaction with OO programming (or different applications using relational database) because they all suggest a systematic method that use "instance" in a structural database to track all the components of costs and fees each time a financial transaction is processed. It has been recognized that a financial system would be able to measure profitability in a flexible manner and to measure the impact of any changes from banking clients by tracking those variables,

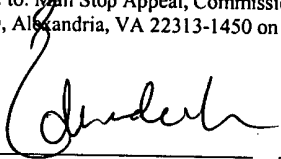
Appellant respectfully disagrees with the Examiner. Claim 64 depends from Claims 47 and 63, Claim 66 depends from 47 and 65, and Claim 85 depends from 68 and 84, and thus each of Claims 64, 66 and 85 are allowable for at least the reasons set forth above with respect to Claim 47. In addition, as recited in Claims 64, 66 and 85, the account instance, the client instance, and the market segment instance, respectively, are each linked to the transaction instance by an entity instance, which is neither disclosed nor suggested by any of Moore, Burt and Claus. Thus, Claims 64, 66 and 85 are each allowable over Moore, Burt and Clauss, individually and in combination. Appellant respectfully requests the Board to reverse the Examiner's rejection of Claims 64, 66 and 85 under 35 U.S.C. § 103(a) over Moore, Burt and Claus.



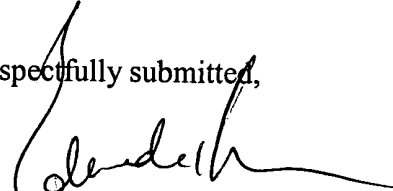
Conclusion

Claims 47-86 are allowable over the prior art of record. As Claims 47-86 have not been further amended, Appellant respectfully requests reinstatement of Applicant's pending appeal.

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Respectfully submitted,

  
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